

AMENDMENTS TO THE CLAIMS

1. (Currently amended) An electric drive vehicle comprising:

a frame;

a wheel, having a wheel hub with at least one hub sprocket, said wheel rotatably mounted in said frame;

an electric motor, having a rotatable assembly and a fixed assembly, said fixed assembly attached to said frame;

a motor sprocket rotationally fixed ~~locked~~ to said rotatable assembly of said motor, ~~whereby~~ wherein the motor sprocket rotates with ~~the a~~ same angular velocity at all times as the rotatable assembly in both a clockwise direction and in a counter clockwise direction during all operation of the electric drive vehicle;

a drive chain connecting said motor sprocket and ~~a~~ said at least one hub sprocket for transferring rotary motion from said motor sprocket to said at least one hub sprocket;

a pedal crank assembly rotatably mounted in said frame; and

a uni-directional drive connecting said motor sprocket and said pedal crank assembly for transferring rotary motion from said pedal crank assembly to said motor sprocket, but not from said motor sprocket to said pedal crank assembly ,

whereby said vehicle can be driven either by said pedal crank assembly through said motor sprocket or by said motor alone without turning said pedal crank assembly , or by both said pedal crank assembly and said motor in unison.

2. **(Previously amended)** The electric drive vehicle of Claim 1, wherein said vehicle is a bicycle and wherein said hub is a multi-speed hub.

3. **(Previously amended)** The electric drive bicycle of Claim 2, wherein said multi-speed hub has internal gears that can be shifted.

4. **(Currently amended)** The electric drive bicycle of Claim 2, wherein said multi-speed hub has two or more sprockets on a freewheel, and a corresponding derailleur that can shift the drive chain to engage any of said sprockets.

5. **(Currently amended)** The electric drive vehicle of Claim 1, wherein said electric motor is slow speed and gearless, and wherein said motor is in electrical communication with an electrical power source, whereby said pedal crank assembly can efficiently drive said motor for recharging the electrical power source.

6 - 66 **(Cancelled)**

67. **(Previously entered)** The electric drive vehicle of Claim 1, wherein said electric motor is a hub motor.

68. **(Previously entered)** The electric drive vehicle of Claim 67, wherein said rotatable assembly is an outer case of the hub motor and the fixed assembly is a hub motor axle of the hub motor.

69. **(Previously entered)** The electric drive vehicle of Claim 68, wherein said motor sprocket is attached to said outer case.

70. **(Currently amended)** The electric drive vehicle of Claim 1, wherein said electric motor turns at approximately 260 RPM ~~motor~~ in a bicycle traveling at 20 miles per hour.

71. **(Previously entered)** The electric drive vehicle of Claim 1, wherein said electric motor is a gearless motor.

72. **(Currently amended)** The electric drive vehicle of Claim 1, wherein said

uni-directional drive comprises:

a freewheel connected to said rotatable assembly;

a drive sprocket attached to the freewheel, wherein a forward rotation is

transmittable from the drive sprocket to the rotatable assembly but not from the

rotatable assembly to the drive sprocket;

a pedal sprocket attached to the pedal crank assembly; and

a pedal chain connecting the pedal sprocket to the drive sprocket.

1 73. **(Currently amended)** The electric drive vehicle of Claim 1, wherein said
2 uni-directional drive comprises:
3 a drive sprocket uni-directionally connected to the said rotatable assembly,
4 wherein a forward rotation is transmittable from the drive sprocket to the rotatable
5 assembly but not from the rotatable assembly to the drive sprocket;
6 a pedal sprocket attached to the pedal crank assembly; and
7 a pedal chain connecting the pedal sprocket to the drive sprocket.

74. **(Currently amended)** The electric drive vehicle of Claim 73 4, wherein said
electric motor is mounted to the frame using slots to allow adjustment of tension of the
pedal chain.

75. **(Previously presented)** The electric drive vehicle of Claim 1, wherein said motor
sprocket is approximately the same size as said at least one hub sprocket.

1 76. **(Currently amended)** The electric drive vehicle of Claim 1, further including:

2 a second hub freewheel rotationally connected to said wheel hub;

3 a second hub sprocket attached to the second hub freewheel, wherein a forward
4 rotation is transmittable from the hub to the second hub sprocket but not from the
5 second hub sprocket to the hub;

6 a second motor sprocket rotationally fixed to said rotatable assembly of said
7 motor; and

8 a third regenerating chain connecting the second hub sprocket and the second
9 motor sprocket,

10 whereby a power supply may be recharged.

1 77. **(Currently amended)** The electric drive vehicle of Claim 1, further including:

2 a second hub sprocket uni-directionally connected to the wheel hub, wherein a
3 forward rotation is transmittable from the hub to the second hub sprocket but not from
4 the second hub sprocket to the hub;

5 a second motor sprocket rotationally fixed to said rotatable assembly of said
6 motor; and

7 a third regenerating chain connecting the second hub sprocket and the second
8 motor sprocket,

9 whereby a power supply may be recharged.

1 78. **(Currently amended)** An electric drive vehicle comprising:
2 a frame;
3 a wheel, having a hub with at least one hub sprocket, said wheel rotatably
4 mounted in said frame;
5 ~~an~~ a hub motor comprising a motor axle and an outer case, said motor axle
6 fixedly attached to said frame.
7 a motor sprocket rotationally ~~fixedly attached~~ fixed to said outer case;
8 a drive chain connecting said motor sprocket and said at least one hub sprocket
9 for transferring rotary motion from said motor sprocket to said at least one hub
10 sprocket;
11 a pedal crank assembly rotatably mounted in said frame; and
12 a uni-directional drive connecting said motor sprocket and said pedal crank
13 assembly for transferring rotary motion from said pedal crank assembly to said motor
14 sprocket, but not from said motor sprocket to said crank assembly,
15 whereby said vehicle can be driven either by said crank assembly through said
16 motor sprocket or by said motor alone without turning said crank assembly, or by both
17 said crank assembly and said motor in unison.

79. **(Currently amended)** An electric drive vehicle comprising:

a frame;

a wheel, having a multi-speed hub with at least one hub sprocket, said wheel rotatably mounted in said frame and said at least one hub sprocket connected to said wheel through a third hub freewheel wherein forward rotational motion is transmittable from said at least one hub sprocket to said wheel, but not from said wheel to said at least one hub sprocket;

an electric motor, having a rotatable assembly and a fixed assembly, said fixed assembly attached to said frame;

a motor sprocket rotationally fixed to said rotatable assembly of said motor, wherein the motor sprocket rotates with a same angular velocity at all times as the rotatable assembly in both a clockwise direction and in a counter clockwise direction during all operation of the electric drive vehicle;

a drive chain connecting said motor sprocket and ~~a~~ said at least one hub sprocket for transferring rotary motion from said motor sprocket to said at least one hub sprocket ;

a pedal crank assembly rotatably mounted in said frame;

a freewheel rotationally connected to said rotatable assembly;

a drive sprocket attached to the freewheel, wherein a forward rotation is transmittable from the drive sprocket to said rotatable assembly but not from said rotatable assembly to said drive sprocket;

a pedal sprocket attached to said pedal crank assembly; and

a pedal chain connecting the pedal sprocket to said drive sprocket,

24 whereby said vehicle can be driven either by said pedal crank assembly through
25 said motor sprocket or by said motor alone without turning said pedal crank assembly,
26 or by both said pedal crank assembly and said motor in unison.

1 80. **(Currently amended)** An electric drive vehicle comprising:
2 a frame;
3 a wheel, having a hub with at least one hub sprocket, said wheel rotatably
4 mounted in said frame;
5 an electric motor which turns at approximately 260 RPM in a bicycle traveling at
6 20 miles per hour, the electric motor comprising a motor axle and an outer case, said
7 motor axle fixedly attached to said frame;
8 a motor sprocket attached to said outer case;
9 a drive chain connecting said motor sprocket and ~~a~~ said at least one hub
10 sprocket for transferring rotary motion from said motor sprocket to said at least one hub
11 sprocket ;
12 a pedal crank assembly rotatably mounted in said frame;
13 a drive sprocket uni-directionally connected to the outer case, wherein a forward
14 rotation is transmittable from the drive sprocket to said outer case but not from said
15 outer case to said drive sprocket;
16 a pedal sprocket attached to said pedal crank assembly; and
17 a pedal chain connecting the pedal sprocket to said drive sprocket,
18 whereby said vehicle can be driven either by said pedal crank assembly through
19 said motor sprocket or by said motor alone without turning said pedal crank assembly,
20 or by both said pedal crank assembly and said motor in unison.

81. **(Currently amended)** An electric drive vehicle comprising:

- a frame;
- a wheel, having a wheel hub with at least one hub sprocket, said wheel rotatably mounted in said frame;
- ~~an~~ a hub motor comprising a motor axle and an outer case, said motor axle fixedly attached to said frame.
- a motor sprocket rotationally ~~fixedly attached~~ fixed to said outer case;
- a drive chain connecting said motor sprocket and said at least one hub sprocket for transferring rotary motion from said motor sprocket to said at least one hub sprocket;
- a pedal crank assembly rotatably mounted in said frame;
- a freewheel attached to said outer case;
- a drive sprocket attached to the freewheel, wherein a forward rotation is transmittable from the drive sprocket to said ~~rotatable assembly~~ motor sprocket but not from said ~~rotatable assembly~~ motor sprocket to said drive sprocket;
- a pedal sprocket attached to said pedal crank assembly; and
- a pedal chain connecting the pedal sprocket to said drive sprocket,

whereby said vehicle can be driven either by said pedal crank assembly through said motor sprocket or by said motor alone without turning said pedal crank assembly, or by both said pedal crank assembly and said motor in unison.